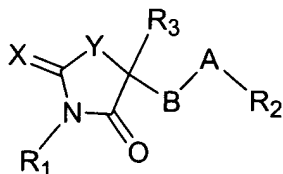


1. (original) A composition comprising a compound of the formula



or pharmaceutically acceptable salts thereof together with a pharmaceutically acceptable carrier, excipient, or diluent, wherein

A is aryl or heteroaryl;

B is C₁-C₆ alkyl or C₂-C₆ alkenyl;

X is sulfur, oxygen, =CR₄R₅, =NR₄, =NC(O)R₄, or =NSO₂R₄,

Y is sulfur, oxygen, -C(R₄)(R₅), -N(R₄), -NC(O)(R₄), -NSO₂(R₄), -S(O)₂, or -S(O);

R₁ is -H, -NH₂, C₁-C₆ alkyl, C₁-C₂ alkenyl, C₁-C₆ alkyl-S-C₁-C₆ alkyl, C₀-C₆ alky-aryl, C₀-C₆ alkyl-C(O)OR₆, C₀-C₆ alkyl-heteroaryl, C₀-C₆ alkyl-heterocyclyl, C₀-C₆ alkyl-carbocyclyl, -NH-SO₂-aryl, -C₀-C₆ alkyl-C(O)NR₆R₇, -C₀-C₆ alkyl-C(S)NR₆R₇, C₀-C₆ alky-heteroaryl-aryl, -NHC(O)-aryl, C₀-C₆ alkyl-C(O)NH-C₀-C₆ alkyl-C(O)-O-R₆, C₀-C₆ alkyl-C(O)-NH-C₀-C₆ alkyl-aryl, C₀-C₆ alkyl-C(O)-NH-C₀-C₆ alkyl-heteroaryl, C₀-C₆ alkyl-C(O)-NH-C₀-C₆ alkyl-heterocyclyl, C₀-C₆ alkyl-C(O)-NH-C₀-C₆ alkyl-carbocyclyl, -SO₂-R₆, C(O)-R₆ or -C(O)-OR₆, wherein each one of the alkyl, aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R₅;

R₂ is -H, halogen, C₁-C₆ alkyl, C₀-C₆ alky-aryl, -NO₂, C₀-C₆ alkyl-C(O)-OR₆, C₀-C₆ alkyl-heteroaryl, C₀-C₆ alkyl-heterocyclyl, C₀-C₆ alkyl-carbocyclyl, -N(R₆)-C(O)NR₆R₇, -NHSO₂-aryl, C₀-C₆ alky-heteroaryl-aryl or -C(O)-R₆, wherein each one of the aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R₄;

R₃ is -H, C₁-C₆ alkyl or C₂-C₆ alkenyl; or

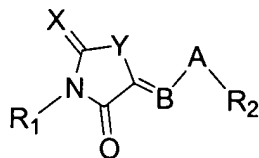
R₃ and B together with the carbon atom to which they are attached form an alkenyl or a spirocyclic ring;

R₄ is halogen, oxo, -C(O)OR₆, -NO₂, C₁-C₆ alkyl optionally substituted with halo, -C₁-C₆ alkoxy optionally substituted with halo, -CH₃, -SO₂NH₂ or -C(O)-OR₆;

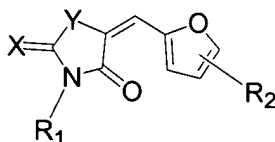
R₅ is halogen, oxo, C₁-C₆ alkoxy, C₁-C₆ alkyl, C₀-C₆ alkyl-aryl, -NO₂, di(C₁-C₆ alkyl)amino, -CF₃, -OH, -SO₂NH₂ or -C(O)-OR₆; and

R₆ and R₇ are independently -H, halogen, C₁-C₆ alkoxy, C₁-C₆ alkyl, C₂-C₆ alkenyl, aryl, di(C₁-C₆ alkyl)amino, -CF₃, -OH or -C(O)-OR₆.

2. (original) The composition according to claim 1 wherein the compound is of the formula



3. (original) The composition according to claim 2 wherein the compound is of the formula

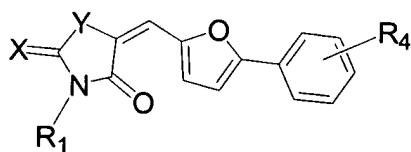


4. (original) The composition according to claim 3 wherein R₁ is -H, C₁-C₆ alkyl, C₁-C₂ alkenyl, C₀-C₆ alky-aryl, C₀-C₆ alkyl-C(O)OR₆, C₀-C₆ alkyl-heteroaryl, C₀-C₆ alkyl-heterocyclyl, C₀-C₆ alkyl-carbocyclyl or C₀-C₆ alky-heteroaryl-aryl, and R₂ is -H, halogen, C₁-C₆ alkyl, C₀-C₆ alky-aryl.

5. (original) The composition according to claim 4 wherein R₁ is -H, C₁-C₆ alkyl, C₁-C₂ alkenyl, C₀-C₆ alky-aryl, or C₀-C₆ alkyl-C(O)OR₆ and R₂ is C₀-C₆ alky-aryl.

6. (original) The composition according to claim 5 wherein R₁ is -H, allyl, phenyl or benzyl and R₂ is phenyl.

7. (original) The composition according to claim 3 wherein the compound is of the formula

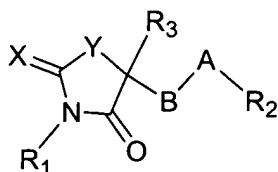


8. (original) The composition according to claim 7 wherein R₁ is -H, C₁-C₆ alkyl, C₁-C₂ alkenyl, C₀-C₆ alky-aryl, C₀-C₆ alkyl-C(O)OR₆, C₀-C₆ alkyl-heteroaryl, C₀-C₆ alkyl-heterocyclyl, C₀-C₆ alkyl-carbocyclyl or C₀-C₆ alky-heteroaryl-aryl, and R₄ is halogen, oxo, -NO₂, C₁-C₆ alkyl, -C₁-C₆ alkoxy, -CF₃, -SO₂NH₂, or -C(O)-OR₆.

9. (original) The composition according to claim 8 wherein R_1 is -H, C_1 - C_6 alkyl, C_1 - C_2 alkenyl, C_0 - C_6 alky-aryl, or C_0 - C_6 alkyl-C(O)OR₆, and R_4 is halogen, -NO₂, C_1 - C_6 alkyl, - C_1 - C_6 alkoxy, -CF₃, -SO₂NH₂, or -C(O)-OR₆.

10. (original) The composition according to claim 9 wherein R_1 is -H, allyl, phenyl or benzyl and R_4 is chloro, bromo, fluoro, -NO₂, -OCH₃, -CF₃ or -C(O)-OH.

11. (original) A compound of the formula



or pharmaceutically acceptable salts thereof together with a pharmaceutically acceptable carrier, excipient, or diluent, wherein

A is aryl or heteroaryl;

B is C_1 - C_6 alkyl or C_2 - C_6 alkenyl;

X is sulfur, oxygen, =CR₄R₅, =NR₄, =NC(O)R₄, or =NSO₂R₄,

Y is sulfur, oxygen, -C(R₄)(R₅)-, -N(R₄)-, -NC(O)(R₄)-, -NSO₂(R₄)-, -S(O)₂-, or -S(O)-;

R_1 is -H, -NH₂, C_1 - C_6 alkyl, C_1 - C_2 alkenyl, C_1 - C_6 alkyl-S- C_1 - C_6 alkyl, C_0 - C_6 alky-aryl, C_0 - C_6 alkyl-C(O)OR₆, C_0 - C_6 alkyl-heteroaryl, C_0 - C_6 alkyl-heterocyclyl, C_0 - C_6 alkyl-carbocyclyl, -NH-SO₂-aryl, - C_0 - C_6 alkyl-C(O)NR₆R₇, - C_0 - C_6 alkyl-C(S)NR₆R₇, C_0 - C_6 alky-heteroaryl-aryl, -NHC(O)-aryl, C_0 - C_6 alkyl-C(O)NH- C_0 - C_6 alkyl-C(O)-O-R₆, C_0 - C_6 alkyl-C(O)-NH- C_0 - C_6 alkyl-aryl, C_0 - C_6 alkyl-C(O)-NH- C_0 - C_6 alkyl-heteroaryl, C_0 - C_6 alkyl-C(O)-NH- C_0 - C_6 alkyl-heterocyclyl, C_0 - C_6 alkyl-C(O)-NH- C_0 - C_6 alkyl-carbocyclyl, -SO₂-R₆, C(O)-R₆ or -C(O)-OR₆, wherein each one of the alkyl, aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R₅;

R_2 is -H, halogen, C_1 - C_6 alkyl, C_0 - C_6 alky-aryl, -NO₂, C_0 - C_6 alkyl-C(O)-OR₆, C_0 - C_6 alkyl-heteroaryl, C_0 - C_6 alkyl-heterocyclyl, C_0 - C_6 alkyl-carbocyclyl, -N(R₆)-C(O)NR₆R₇, -NHSO₂-aryl, C_0 - C_6 alky-heteroaryl-aryl or -C(O)-R₆, wherein each one of the aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R₄;

R_3 is -H, C_1 - C_6 alkyl or C_2 - C_6 alkenyl; or

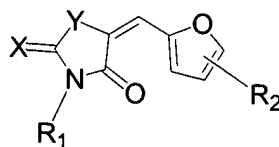
R_3 and B together with the carbon atom to which they are attached form an alkenyl or a spirocyclic ring;

R₄ is halogen, oxo, -C(O)OR₆, -NO₂, C₁-C₆ alkyl optionally substituted with halo, -C₁-C₆ alkoxy optionally substituted with halo, -CF₃, -SO₂NH₂ or -C(O)-OR₆;

R₅ is halogen, oxo, C₁-C₆ alkoxy, C₁-C₆ alkyl, C₀-C₆ alkyl-aryl, -NO₂, di(C₁-C₆ alkyl)amino, -CF₃, -OH, -SO₂NH₂ or -C(O)-OR₆; and

R₆ and R₇ are independently -H, halogen, C₁-C₆ alkoxy, C₁-C₆ alkyl, C₂-C₆ alkenyl, aryl, di(C₁-C₆ alkyl)amino, -CF₃, -OH or -C(O)-OR₆,

provided the compound is not a compound of the formula



X and Y are independently sulfur, oxygen, -CR₄R₅, -NR₄, -NC(O)R₄, -NSO₂R₄, -SO₂, or -SO;

R₁ is -H, -NH₂, C₁-C₆ alkyl, C₁-C₂ alkenyl, C₁-C₆ alkyl-S-C₁-C₆ alkyl, C₀-C₆ alky-aryl, C₀-C₆ alkyl-C(O)OR₆, C₀-C₆ alkyl-heteroaryl, C₀-C₆ alkyl-heterocyclyl, C₀-C₆ alkyl-carbocyclyl, -NH-SO₂-aryl, -C₀-C₆ alkyl-C(O)NR₆R₇, -C₀-C₆ alkyl-C(S)NR₆R₇, C₀-C₆ alky-heteroaryl-aryl, -NHC(O)-aryl, C₀-C₆ alkyl-C(O)NH-C₀-C₆ alkyl-C(O)-O-R₆, C₀-C₆ alkyl-C(O)-NH-C₀-C₆ alkyl-aryl, C₀-C₆ alkyl-C(O)-NH-C₀-C₆ alkyl-heteroaryl, C₀-C₆ alkyl-C(O)-NH-C₀-C₆ alkyl-heterocyclyl, C₀-C₆ alkyl-C(O)-NH-C₀-C₆ alkyl-carbocyclyl, -SO₂-R₆, C(O)-R₆, or -C(O)-OR₆, wherein each one of the alkyl, aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R₅;

R₂ is -H, halogen, C₁-C₆ alkyl, C₀-C₆ alky-aryl, -NO₂, C₀-C₆ alkyl-C(O)-OR₆, C₀-C₆ alkyl-heteroaryl, C₀-C₆ alkyl-heterocyclyl, C₀-C₆ alkyl-carbocyclyl, -N(R₆)-C(O)NR₆R₇, -NHSO₂-aryl, C₀-C₆ alky-heteroaryl-aryl, or -C(O)-R₆, wherein each one of the aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R₄;

R₄ is halogen, oxo, -C(O)OR₆, -NO₂, C₁-C₆ alkyl optionally substituted with halo, -C₁-C₆ alkoxy optionally substituted with halo, -CF₃, -SO₂NH₂, or -C(O)-OR₆;

R₅ is halogen, oxo, C₁-C₆ alkoxy, C₁-C₆ alkyl, C₀-C₆ alkyl-aryl, -NO₂, di(C₁-C₆ alkyl)amino, -CF₃, -OH, -SO₂NH₂, or -C(O)-OR₆; and

R₆ and R₇ are independently -H, halogen, C₁-C₆ alkoxy, C₁-C₆ alkyl, C₂-C₆ alkenyl, aryl, di(C₁-C₆ alkyl)amino, -CF₃, -OH, or -C(O)-OR₆.

12. (currently amended) A method of inhibiting ubiquitination in a cell comprising contacting a cell in which inhibition of ubiquitination is desired with a composition according to claim 1 ~~any one of claims 1-10 or a compound according to claim 11~~.
13. (original) The method according to claim 12 wherein the cell is from a mammal.
14. (original) The method according to claim 13 wherein the mammal is human.
15. (currently amended) A method of treating cell proliferative diseases or conditions comprising administering to a patient an effective amount of a composition according to claim 1 ~~any one of claims 1-10 or a compound according to claim 11~~.
16. (original) The method according to claim 15 wherein the cell proliferative diseases are cancers.
17. (original) The method according to claim 16 wherein the patient is human.
18. (new) A method of inhibiting ubiquitination in a cell comprising contacting a cell in which inhibition of ubiquitination is desired with a composition according to claim 2.
19. (new) A method of inhibiting ubiquitination in a cell comprising contacting a cell in which inhibition of ubiquitination is desired with a composition according to claim 3.
20. (new) A method of inhibiting ubiquitination in a cell comprising contacting a cell in which inhibition of ubiquitination is desired with a composition according to claim 7.